in this appeal be sustainable, it is fundamental that "each and every element as set forth in the claim be found, either expressly or inherently described, in a single prior art reference (Hop reference in the present case)." Verdegall Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also, Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989), where the court states, "The identical invention must be shown in as complete detail as is contained in the ... claim".

Independent Claim 1 requires and positively recites a computer comprising: "a provision for user input", "a provision for output", "a microprocessor coupled to said user input and said output", and "an interface coupled to said microprocessor, said interface being **directly connectable** to a corresponding interface in a portable telephone".

Independent Claim 29 requires and positively recites a computer comprising: "a display device", "a keyboard", "a microprocessor coupled to said display device and keyboard", "memory coupled to said microprocessor for storing at least program instructions", "a logic unit coupled to said microprocessor", and "an interface coupled to said microprocessor, said interface being **directly connectable** to a corresponding interface in a portable telephone".

In contrast, the Hop reference discloses in FIG. 1 an apparatus in which a portable computer (2) is coupled to a cellular connector (28) via a first cable (bidirectional serial bus 22) which itself is coupled to a cellular subscriber equipment (CSE) (4). Portable computer (2) is further coupled to an interface circuit (3) via a second cable (29) which is itself coupled to the mobile telephone handset (4).

Hop further discloses that CSE unit 4 can be any of a variety of commercially available units, such as a Motorola model 6800XL (col. 4, lines 5-7), which Hop discloses is a conventional mobile telephone handset (col. 4, lines 60). Hop also teaches that interface circuit 3 is connected to CSE 4 by a three-wire bus which includes TDATA (true data) conductor 25A, CDATA (complementary data) conductor 25 B, and RDATA (return data) conductor 25C of CSE unit 4. Interface circuit 3 also is connected to CSE 4 by RX, TX conductors 31 (col. 4, lines 41-46). Hop teaches that interface circuit 3 preferably is included in a small housing into which eight

conductors, generally designated by numeral 45, within a coil cord from handset 27 (FIG. 2) are plugged (col. 5, lines 5-10). Numeral 43 represents a plug-in connector for the coil cord from handset 27. Numeral 44 designates connection of the individual conductor 45 to CSE unit 44 (col. 5, lines 10-13).

Hop further discloses that cellular connector 28 can be a Motorola model 51565A which is connected to CSE 4 via the three-wire bus 25A-C and RX (receive), TX (transmit) cable 31, and performs the function of converting cellular "two way radio" signals to standard telephone "tip and ring" signals. Cellular connector 28 is connected by an 8 wire bus 45 to handset 27, which Hop teaches is the same as CSE 4, which includes the same conductors shown in bus 45 in FIG. 3 (col. 4, lines 62-68).

As a result, Hop teaches an apparatus with four physically separate devices: CSE 4; cellular connector 28; interface circuit 3; and portable computer 2, which are coupled together in an arrangement in which interface circuit is coupled to CSE 4 via a first cable/bus and is coupled to portable computer 2 via a second cable/bus and cellular connector 28 is coupled to CSE 4 via a third cable/bus and is coupled to portable computer 2 via a fourth cable/bus. Thus, interface circuit 3 is not a part of CSE 4, not a part of cellular connector 28, not a part of handset 27, and not an integrated part of any "portable telephone", but even assuming, arguendo, that it were part of a "portable telephone" formed of discrete parts cable/bus coupled together, the fact remains that interface circuit 3 is still coupled to portable computer 2 via bidirectional bus 22. As a result, Hop fails to teach or suggest a computer having an interface that is "DIRECTLY connectable to a corresponding interface in a portable telephone", as required by Applicants' Claims 1 and 29. The 35 U.S.C. § 102(b) rejection of Claims 1 and 29 is overcome.

Claims 2-7, 12-14, 15-17 and 19-28 stand allowable as depending from allowable claims and including further limitations not taught or suggested by the Hop reference.

Claim 2 further defines the computer of Claim 1, wherein said user input is coupled to a keyboard. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 1.

Claim 3 further defines the computer of Claim 1, wherein said output is coupled to a display device. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 1.

Claim 4 further defines the computer of Claim 1, wherein said user input is coupled to a keyboard and said output is coupled to a display device. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 1.

Claim 5 further defines the computer of Claim 1, further comprising memory for storing at least program instructions. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 1.

Claim 6 further defines the computer of Claim 1, further comprising core logic coupled to said microprocessor. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 1.

Claim 7 further defines the computer of Claim 1, wherein said computer is a portable computer. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 1.

Claim 12 further defines the computer of Claim 1, further including a modem coupled to said microprocessor. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 1.

Claim 13 further defines the computer of Claim 1, wherein said computer utilizes said portable telephone to transmit and receive voice and data signals while said computer and portable telephone are connected. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 1.

Claim 14 further defines the computer of Claim 12, wherein said computer utilizes said portable telephone to transmit and receive voice and data signals while said computer and portable telephone are connected. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 12.

Claim 15 further defines the computer of Claim 1, wherein said interface coupled to said microprocessor comprises: at least one voice channel lead, one command channel lead and a ground/reference lead for connection to corresponding leads in a corresponding interface in said portable telephone. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 1.

Claim 16 further defines the computer of Claim 15, wherein said at least one voice channel lead facilitates a bidirectional half duplex mode. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 1.

Claim 17 further defines the computer of Claim 15, wherein said at least one command channel lead facilitates a bidirectional half duplex mode. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 15.

Claim 19 further defines the computer of Claim 15, wherein voice and data are transmitted on said at least one voice channel lead. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 15.

Claim 20 further defines the computer of Claim 15, wherein said interface coupled to said microprocessor further includes at least one data channel lead. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 15.

Claim 21 further defines the computer of Claim 20, wherein said at least one data channel lead facilitates a bidirectional half duplex mode. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 20.

Claim 22 further defines the computer of Claim 15, wherein said interface coupled to said microprocessor further includes a second voice channel lead. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 15.

Claim 23 further defines the computer of Claim 22, wherein each of said voice channel leads facilitates a unidirectional full duplex mode. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 22.

Claim 24 further defines the computer of Claim 15, wherein said interface coupled to said microprocessor further includes a second command channel lead. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 15.

Claim 25 further defines the computer of Claim 24, wherein each of said voice channel leads facilitates a unidirectional full duplex mode. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 24.

Claim 26 further defines the computer of Claim 22, wherein said interface coupled to said microprocessor further includes a second command channel lead. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 22.

Claim 27 further defines the computer of Claim 26, wherein each of said voice channel leads facilitates a unidirectional full duplex mode. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 26.

Claim 28 further defines the computer of Claim 23, wherein voice and data are transmitted on said voice channel leads. The Hop reference fails to teach or suggest this further limitation in combination with the requirements of Claim 23.

Claims 8-11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hop. Applicants respectfully traverse.

Claim 8 further defines the computer of Claim 1, wherein said interface is located within a cavity in said computer.

Claim 9 further defines the computer of Claim 8, wherein said portable telephone fits at least partially within said cavity when directly connected to said interface.

Claim 10 further defines the computer of Claim 8, wherein said portable telephone fits completely within said cavity when directly connected to said interface.

Claim 11 further defines the computer of Claim 1, further including a mechanism on said computer that cooperates with a corresponding mechanism on said computer for removably securing said portable telephone to said computer.

The Examiner has admitted that Hop does not refer to a cavity or receptacle for the portable telephone in his disclosure (Office action dated 1/23/97, page 5 lines). The Examiner suggests, however, that since Hop discloses, directly and indirectly, mobility and portability in his system, "configuration of the components is a matter of which factor(s) are more important to the intended end-user". Applicants respectfully submit that "mobility" and "portability" are not an adequate teaching for Applicants' "interface located within a cavity in the computer". The Examiner seems to be suggesting that undirected skill of one in the pertinent art is an adequate substitute for statutory prior art. The argument that undirected skill of one in the pertinent art is an adequate substitute for statutory prior art was rejected by the CCPA in In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). The 35 U.S.C. 103(a) rejection of Claims 8-11 is overcome.

Claim 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hop in view of Dent et al. Applicants respectfully traverse.

Claim 18 further defines the computer of Claim 15 (which depends upon Claim 1), wherein said interface coupled to said microprocessor further includes a power lead. Applicants have

previously shown that Hop fails to teach or suggest a computer having an interface that is "DIRECTLY connectable to a corresponding interface in a portable telephone", as required by Applicants' Claims 1, and therefore implicitly fails to teach or suggest the additional teachings of Claim 15 in combination with Claim 1. The Examiner argues that while "Hop does not disclose such a power lead, Dent discloses in col., lines 52-57 the use of a cellular terminal plugged into a personal computer" (Office Action dated 1/23/97, page 6, lines 4-6), thus, goes the Examiner's rationale, "it would have been obvious to one or ordinary skill in the art at the time the invention was made to provide power to cellular telephone while in use to transmit or receive data for the computer to prevent depleting the cellular telephone's battery unnecessarily" (lines 9-13). Again, the Examiner seems to be suggesting that undirected skill of one in the pertinent art is an adequate substitute for statutory prior art. The argument that undirected skill of one in the pertinent art is an adequate substitute for statutory prior art was rejected by the CCPA in In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). The 35 U.S.C. 103(a) rejection of Claim 18 is overcome.

Claims 1-29 stand allowable over the cited art and the application is in allowable form. Applicants respectfully request withdrawal of the rejections and allowance of the application.

Respectfully submitted,

How O. Yenny

Ronald O. Neerings

Reg. No. 34,227

Attorney for Applicants

TEXAS INSTRUMENTS INCORPORATED P.O. BOX 655474, M/S 219

Dallas, Texas 75265 Phone: 972/995-1804

Fax: 972/995-3170 or 995-3511